WHAT IS CLAIMED IS:

1. A method of transporting containers from a first station to a second station within a container filling system, each container defining opposed first and second end sections, the second end section forming a longitudinal recess defined by an inner surface of a sidewall, the method comprising:

providing a carrier plate having at least one mounting piece;

loading a container onto the mounting piece such that the second end section is positioned over the mounting piece and the mounting piece frictionally engages the inner surface of the longitudinal recess; and

moving the carrier plate from the first station to the second station, wherein the mounting piece secures the container relative to the carrier plate during movement of the carrier plate.

2. The method of claim 1, wherein loading the container includes:

aligning the second end section above the mounting piece; and

directing the container toward the mounting piece such that the second end section engages the mounting piece.

3. The method of claim 1, wherein loading the container includes orienting the container such that the first end section is opposite the carrier plate.

4. The method of claim 1, wherein loading the container includes positioning the container in an upright fashion relative to the carrier plate.

5. The method of claim 1, wherein the second end section of the container terminates in a trailing end, and further wherein loading the container includes contacting the trailing end against the carrier plate.

6. The method of claim 1, wherein the inner surface of the longitudinal recess defines a perimeter in transverse cross-section, and further wherein loading the container includes achieving engagement between the mounting piece and at least three points along the perimeter.

7. The method of claim 6, wherein loading the container includes achieving engagement between the mounting piece and an entirety of the perimeter.

8. The method of claim 1, wherein the inner surface of the longitudinal recess defines a shape in transverse cross-section, and further wherein loading the container includes matching the shape of the longitudinal recess with a shape of the mounting piece.

9. The method of claim 8, wherein the shape is circular.

10. The method of claim 8, wherein the shape is selected from the group consisting of triangular, square, and rectangular.

11. The method of claim 1, wherein the mounting piece extends beyond a plane defined by the carrier plate, and further wherein the longitudinal recess extends from an open end to an internal stop surface positioned between the open end and the first end section, and further wherein loading the container includes contacting the internal stop surface with the mounting piece at a location longitudinally spaced from the open end.

12. The method of claim 11, wherein an extension of the mounting piece from the carrier plate approximates a height of the longitudinal recess.

13. The method of claim 11, wherein loading the container includes contacting the inner surface with the mounting piece at at least two longitudinally spaced locations.

14. The method of claim 13, wherein extension of the inner surface from the open end to the internal stop surface defines a reversed frustoconical shape, and further wherein the mounting piece includes a base and a shoulder, the shoulder extending from the base opposite the carrier plate and having an outer dimension less than a diameter of the base, and further wherein loading of the container includes engaging the inner surface with the base.

15. The method of claim 1, wherein the mounting piece includes a base and a shoulder, the shoulder extending from the base opposite the carrier plate, and further wherein loading the container includes guiding the second section onto the base via the shoulder.

16. The method of claim 1, wherein moving the carrier plate is characterized by the mounting piece preventing the container from tipping relative to the carrier plate.

17. The method of claim 1, wherein loading the container includes establishing a contact interface between the mounting plate and the inner surface, and further wherein moving the carrier plate is characterized by an absence of change in the contact interface.

18. The method of claim 1, wherein loading the container is characterized by the absence of contact between an exterior surface of the sidewall and a component extending from the carrier plate.

19. The method of claim 1, wherein the carrier plate includes a multiplicity of mounting pieces, the method further comprising:

loading a multiplicity of containers onto the multiplicity of mounting pieces, respectively.

20. The method of claim 1, wherein the first station is a container loading station and the second station is a filling station.

21. The method of claim 20, further comprising:

at least partially filling the container with a product at the filling station.

22. The method of claim 21, wherein the product is a flowable product.

23. The method of claim 21, wherein the product is yogurt.

24. The method of claim 21, further comprising:

moving the carrier plate from the filling station to a closing station, wherein the mounting plate secures the at least partially filled container relative to the carrier plate during movement from the filling station to the closing station.

25. The method of claim 24, further comprising:

applying a cover to the first end section of the container at the closing station.

26. A container filling system for filling containers, each container defining opposing first and second end sections, the second end section forming a longitudinal recess defined by an interior surface of a sidewall, the system comprising:

a first, container loading station;

a second, container filling station; and

a drive system for transporting containers from the first station to the second station, the drive system having a transport device including:

a carrier plate connected to a drive mechanism, the carrier plate defining an upper surface and a lower surface,

at least one mounting piece assembled to the carrier plate and extending from the upper surface, the mounting piece adapted to engage the interior surface of the longitudinal recess of a respective one of the containers and secure the container relative to the carrier plate,

wherein the transport device is characterized by the absence of posts extending from the upper surface of the carrier plate adjacent the mounting piece.

27. The system of claim 26, wherein the mounting piece includes a base extending from the top surface of the carrier plate, the base defining a maximum outer, transverse dimension of the mounting piece and adapted to receive the second end section of the container.

28. The system of claim 27, wherein a perimeter shape of the base matches a transverse cross-sectional shape of the longitudinal recess.

29. The system of claim 27, wherein the base defines a circular shape in transverse cross-section.

30. The system of claim 27, wherein the base defines a shape in transverse cross-section selected from the group consisting of a square, triangle, and rectangle.

31. The system of claim 27, wherein the longitudinal recess extends from an open, trailing end to an internal stop surface, and further wherein the base has a height less than a longitudinal distance between the trailing end and the internal stop surface.

32. The system of claim 27, wherein the base has a height in the range of 0.1 – 0.4 inch.

33. The system of claim 27, wherein the mounting piece further includes a shoulder extending from the base opposite the carrier plate, the shoulder having a maximum transverse outer dimension less than the maximum transverse outer dimension of the base.

34. The system of claim 33, wherein the base and the shoulder are each circular in transverse cross-section.

35. The system of claim 33, wherein the shoulder and the base combine to define a height in the range of 0.3 – 0.6 inch.

36. The system of claim 33, wherein the base and the shoulder are rings having co-axial central passages.

37. The system of claim 36, wherein the carrier plate forms an aperture, the mounting piece being assembled to the carrier plate such that the central passages are co-axially aligned with the aperture.

38. The system of claim 26, wherein the transport device includes a multiplicity of mounting pieces assembled to the carrier plate.

39. The system of claim 38, wherein the drive system includes a multiplicity of carrier plates each having a multiplicity of mounting pieces assembled thereto.

40. The system of claim 26, wherein the container defines an internal region, the first end section being open to the internal region and the second end section being closed to the internal region, and further wherein the transport device is adapted to receive the container in an upright position at the first station.

41. The system of claim 26, wherein the filling station is adapted to dispense a flowable product into the container.

42. The system of claim 41, wherein the flowable product is yogurt.

43. The system of claim 26, further comprising:

a third, covering station adapted to apply a cover to the first end section of the container after processing by the second station;

wherein the drive system is adapted to transport the container from the second station to the third station.

44. A transport device for use with a container packaging system in packaging one or more containers each defining opposing first and second end sections, the second end section forming a longitudinal recess defined by an interior surface of the sidewall, the transport device comprising:

a carrier plate defining a top surface and a bottom surface; and

at least one mounting piece assembled to the carrier plate and extending from the top surface, the mounting piece adapted to engage the interior surface of the longitudinal recess of a respective one of the containers and secure the container relative to the carrier plate;

wherein the transport device is characterized by the absence of posts extending from the top surface of the carrier plate adjacent the mounting piece.

45. The transport device of claim 44, wherein the mounting piece includes a base defining a maximum outer transverse dimension of the mounting piece, the maximum transverse outer dimension of the base approximating a transverse dimension of the longitudinal recess.

46. The transport device of claim 45, wherein the base defines a continuous perimeter.

47. The transport device of claim 45, wherein the base defines a discontinuous perimeter.

48. The transport device of claim 45, wherein the base includes an exterior surface defining a reversed frustoconical shape.

49. The transport device of claim 45, wherein the base forms a circle in transverse cross-section.